4.2.B. 0513010307.

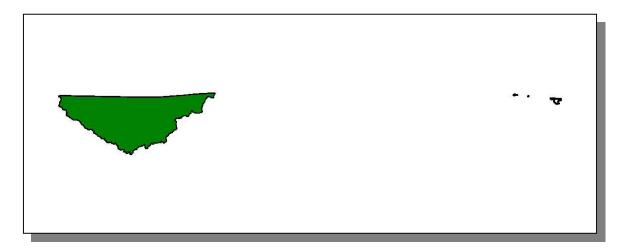


Figure 4-5. Location of Subwatershed 0513010307. All Upper Cumberland River HUC-10 subwatershed boundaries in Tennessee are shown for reference.

4.2.B.i. 051301030708 (Kettle Creek).

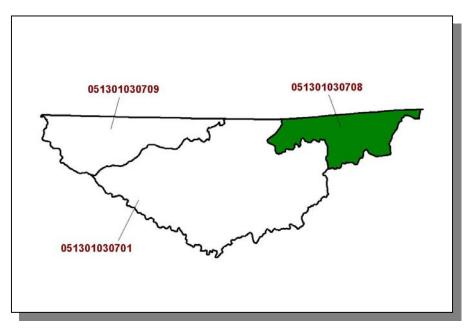


Figure 4-6. Location of Subwatershed 051301030708. All Upper Cumberland River HUC-12 subwatershed boundaries in Tennessee are shown for reference.

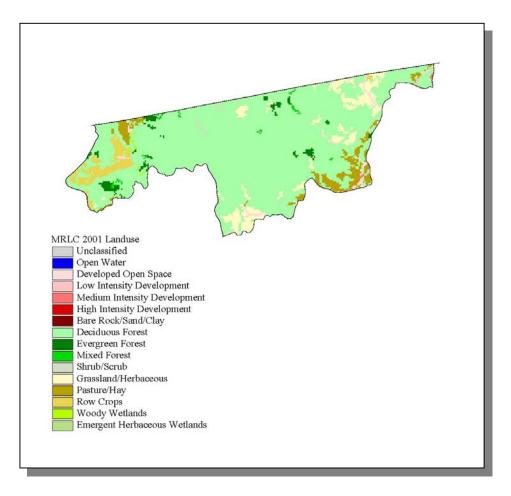


Figure 4-7. Illustration of Land Use Distribution in Subwatershed 051301030708.

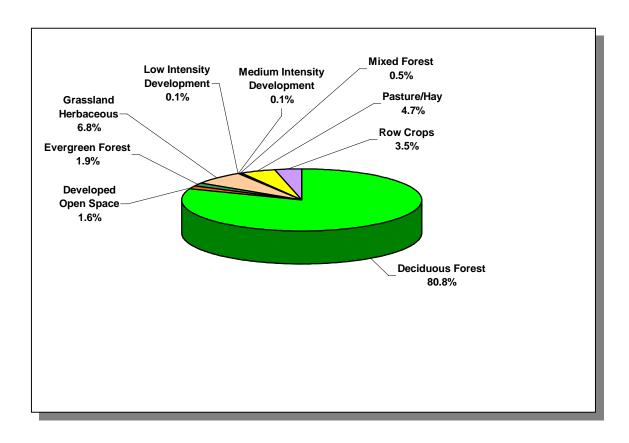


Figure 4-8. Land Use Distribution in Subwatershed 051301030708. More information is provided in Appendix IV.

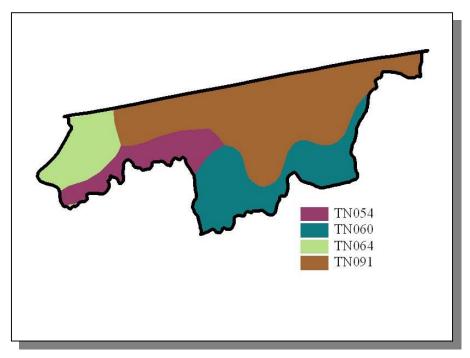


Figure 4-9. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301030708.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN054	0.00	С	3.04	4.84	Loam	0.32
TN060	5.00	В	1.30	5.32	Silty Loam	0.39
TN064	7.00	С	1.19	5.82	Silty Loam	0.37
TN091	0.00	В	2.95	5.86	Loam	0.34

Table 4-6. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301030708. The definition of "Hydrologic Group" is provided in Appendix IV.

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	COUNTY POPULATION			ESTIMATED POPULATION IN WATERSHED				
County	1990	1997	2000	Portion of Watershed (%)	1990	1997	2000	% Change (1990-2000)
	7.000	7.014	7.070	1.00	444	4.45	450	
Clay	7,238	7,311	7,976	1.99	144	145	158	9.7

Table 4-7. Population Estimates in Subwatershed 051301030708.

4.2.B.i.a. Point Source Contributions.

There are no point source contributions in this subwatershed.

4.2.B.i.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS				
Cattle Hogs				
95 <5				

Table 4-8. Summary of Livestock Count Estimates in Subwatershed 051301030708. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves.

LIVESTOCK COUNTS						
County	Cattle	Chickens (Layers)	Hogs	Sheep		
Clay	14,574	18	174	23		

Table 4-9. Summary of Livestock Count Estimates in Clay County. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

	INVEN	ITORY	REMOVAL RATE		
	Forest Land	Timber Land	Growing Stock	Sawtimber	
County	(thousand acres)	(thousand acres)	(million cubic feet)	(million board feet)	
Clay	105.1	105.1	2.3	10.1	

Table 4-10. Forest Acreage and Annual Removal Rates (1987-1994) in Clay County.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	1.14
Grass (Hayland)	0.40
Legumes, Grass (Hayland)	0.53
Grass, Forbs, Legumes (Mixed Pasture)	1.38
Tobacco (Row Crops)	28.52
Farmsteads and Ranch Headquarters	1.56

Table 4-11. Annual Estimated Total Soil Loss in Subwatershed 051301030708.

4.2.B.ii. 051301030709 (McFarland Creek).

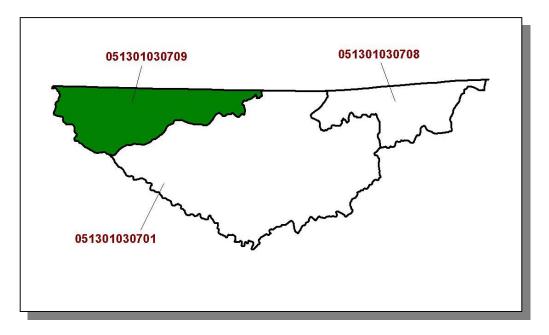


Figure 4-10. Location of Subwatershed 051301030709. All Upper Cumberland River HUC-12 subwatershed boundaries in Tennessee are shown for reference.

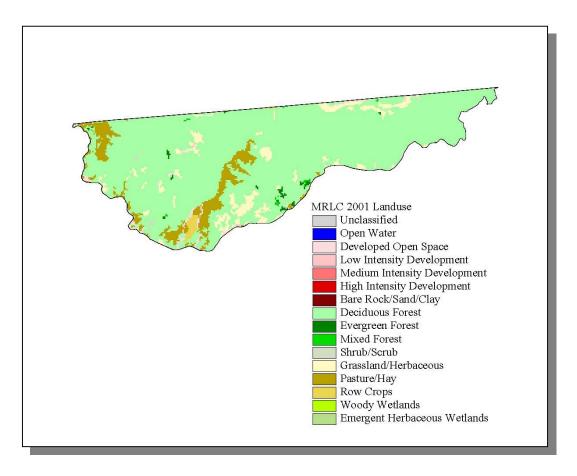


Figure 4-11. Illustration of Land Use Distribution in Subwatershed 051301030709.

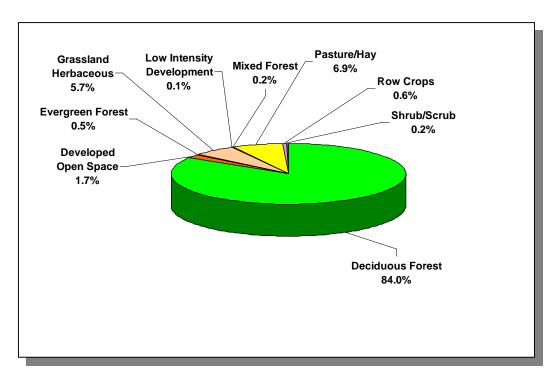


Figure 4-12. Land Use Distribution in Subwatershed 051301030709. More information is provided in Appendix IV.

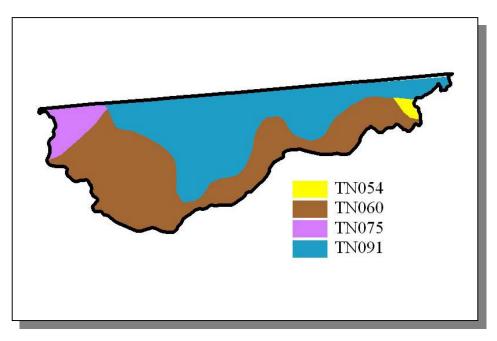


Figure 4-13. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301030709.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN054	0.00	С	3.04	4.84	Loam	0.32
TN060	5.00	В	1.30	5.32	Silty Loam	0.39
TN075	0.00	В	1.33	5.24	Loam	0.31
TN091	0.00	В	2.95	5.86	Loam	0.34

Table 4-12. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301030709. The definition of "Hydrologic Group" is provided in Appendix IV.

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	COUNTY POPULATION		ESTIMATED POPULATION IN WATERSHED					
County	1990	1997	2000	Portion of Watershed (%)	1990	1997	2000	% Change (1990-2000)
				0.70	40=	100		10.0
Clay	7,238	7,311	7,976	2.72	197	199	217	10.2

Table 4-13. Population Estimates in Subwatershed 051301030709.

4.2.B.ii.a. Point Source Contributions.

There are no point source contributions in this subwatershed.

4.2.B.ii.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS			
Cattle Hogs			
190	<5		

Table 4-14. Summary of Livestock Count Estimates in Subwatershed 051301030709. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves.

LIVESTOCK COUNTS						
County	Cattle	Chickens (Layers)	Hogs	Sheep		
Clay	14,574	18	174	23		

Table 4-15. Summary of Livestock Count Estimates in Clay County. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

	INVEN	ITORY	REMOVAL RATE		
	Forest Land	Timber Land	Growing Stock	Sawtimber	
County	(thousand acres)	(thousand acres)	(million cubic feet)	(million board feet)	
Clay	105.1	105.1	2.3	10.1	

Table 4-16. Forest Acreage and Annual Removal Rates (1987-1994) in Clay County.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	1.14
Grass (Hayland)	0.40
Legumes, Grass (Hayland)	0.53
Grass, Forbs, Legumes (Mixed Pasture)	1.38
Tobacco (Close-Grown Cropland)	28.52
Farmsteads and Ranch Headquarters	1.56

Table 4-17. Annual Estimated Total Soil Loss in Subwatershed 051301030709.

4.2.B.iii. 051301030710 (Cumberland River).

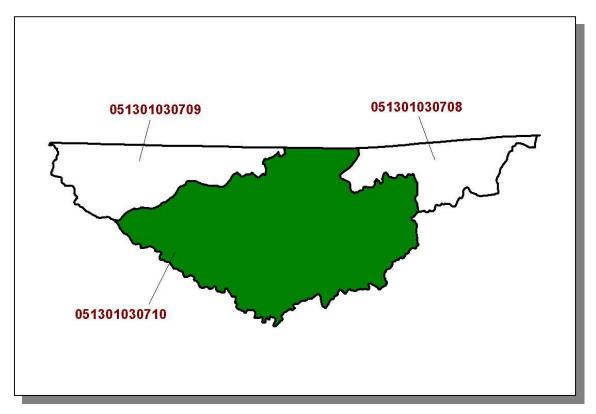


Figure 4-14. Location of Subwatershed 051301030710. All Upper Cumberland River HUC-12 subwatershed boundaries in Tennessee are shown for reference.

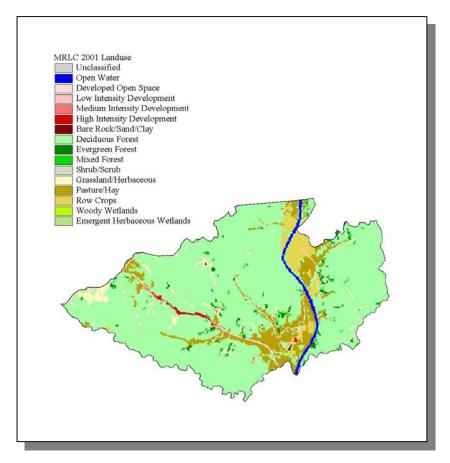


Figure 4-15. Illustration of Land Use Distribution in Subwatershed 051301030710.

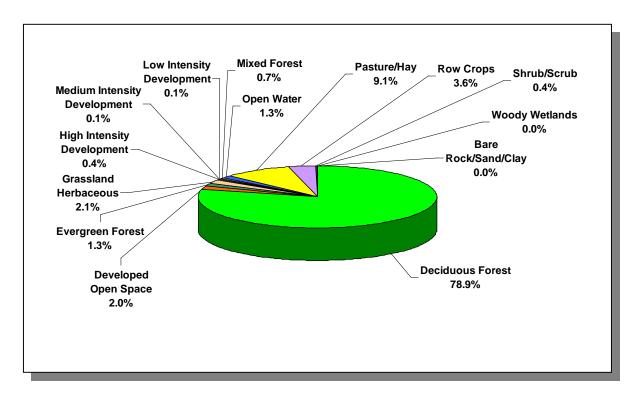


Figure 4-16. Land Use Distribution in Subwatershed 051301030710. More information is provided in Appendix IV.

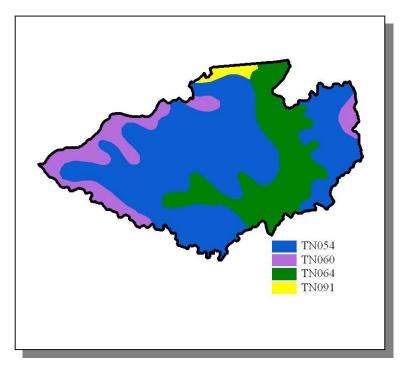


Figure 4-17. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301030710.

STATSGO	PERCENT	HYDROLOGIC	PERMEABILITY	SOIL	ESTIMATED	SOIL
MAP UNIT ID	HYDRIC	GROUP	(in/hour)	pН	SOIL TEXTURE	ERODIBILITY
TN054	0.00	С	3.04	4.84	Loam	0.32
TN060	5.00	В	1.30	5.32	Silty Loam	0.39
TN064	7.00	С	1.19	5.82	Silty Loam	0.37
TN091	0.00	В	2.95	5.86	Loam	0.34

Table 4-18. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301030710. The definition of "Hydrologic Group" is provided in Appendix IV.

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	COUNTY POPULATION				ESTIMATED POPULATION IN WATERSHED			
County	1990	1997	2000	Portion of Watershed (%)	1990	1997	2000	% Change (1990-2000)
Clay	7,238	7,311	7,976	8.08	585	591	645	10.3

Table 4-19. Population Estimates in Subwatershed 051301030710.

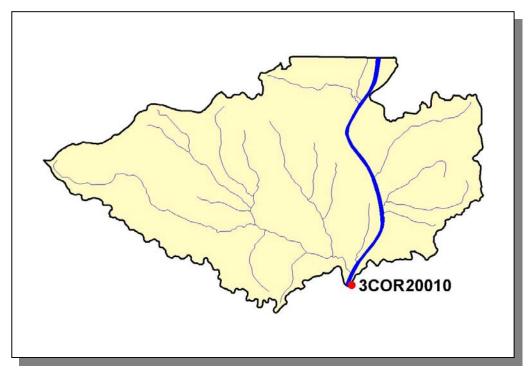


Figure 4-18. Location of Monitoring Sites in EPA's STORET Database in the Tennessee Portion of Subwatershed 051301030710. More information, including site names and locations, and station numbers for sites located in the watershed outside of Tennessee, is provided in Appendix IV.

4.2.B.iii.a. Point Source Contributions.

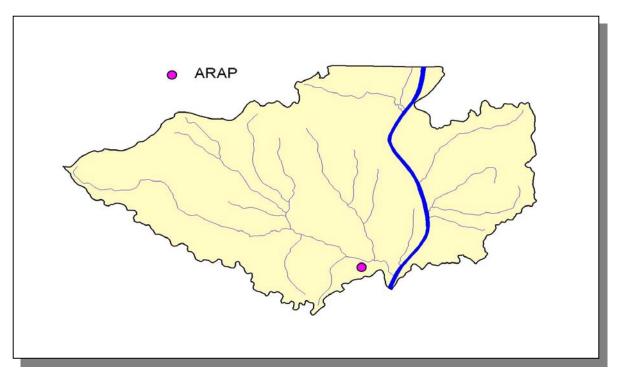


Figure 4-19. Location of Permits Issued in Subwatershed 051301030710. More information, including the names of facilities, is provided in Appendix IV.

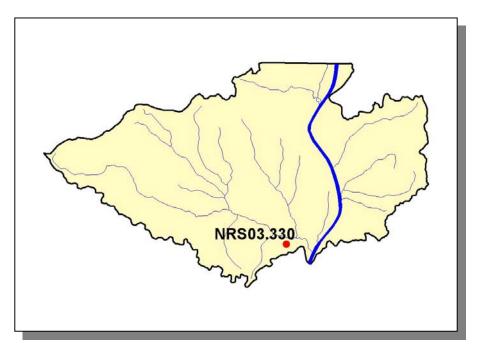


Figure 4-20. Location of Aquatic Resource Alteration Permit (ARAP) Sites (Individual Permits) in Subwatershed 051301030710. More information is provided in Appendix IV.

4.2.B.iii.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS					
Beef Cow	Chickens (Layers)	Hogs	Sheep		
750	<5	9	<5		

Table 4-20. Summary of Livestock Count Estimates in Subwatershed 051301030710.According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

LIVESTOCK COUNTS						
County	Cattle	Cickens (Layers)	Hogs	Sheep		
Clav	14.574	18	174	23		

Table 4-21. Summary of Livestock Count Estimates in Clay County. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

	INVEN	ITORY	REMOVAL RATE		
	Forest Land	Timber Land	Growing Stock	Sawtimber	
County	(thousand acres)	(thousand acres)	(million cubic feet)	(million board feet)	
Clay	105.1	105.1	2.3	10.1	

Table 4-22. Forest Acreage and Annual Removal Rates (1987-1994) in Clay County.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	1.14
Grass (Hayland)	0.40
Legumes, Grass (Hayland)	0.53
Grass, Forbs, Legumes (Mixed Pasture)	1.38
Tobacco (Row Crops)	28.52
Farmsteads and Ranch Headquarters	1.56

Table 4-23. Annual Estimated Total Soil Loss in Subwatershed 051301030710.